Learning to Fly: The Wright Brother's Adventure			
1997 Science			
Learning Standards			
Illinois Science			
Grades 6-8			
Activity/Lesson	**State**	**Standards**	
The Society	IL	SCI.6-8.13.A.3b	Analyze historical and contemporary cases in which the work of science has been affected by both valid and biased scientific practices.
The Society	IL	SCI.6-8.13.B.3b	Identify important contributions to science and technology that have been made by individuals and groups from various cultures.
Wright Brothers: 1900 Glider	IL	SCI.6-8.11.B.3c	Select the most appropriate design and build a prototype or simulation.
Wright Brothers: 1901 Glider	IL	SCI.6-8.11.B.3c	Select the most appropriate design and build a prototype or simulation.
Wright Brothers: 1902 Glider	IL	SCI.6-8.11.B.3c	Select the most appropriate design and build a prototype or simulation.
Wright Brothers: 1903 Flyer	IL	SCI.6-8.11.B.3c	Select the most appropriate design and build a prototype or simulation.
Meet the Wrights	IL	SCI.6-8.11.A.3g	Report and display the process and results of a scientific investigation.
Meet the Wrights	IL	SCI.6-8.13.A.3b	Analyze historical and contemporary cases in which the work of science has been affected by both valid and biased scientific practices.
Meet the Wrights	IL	SCI.6-8.13.B.3b	Identify important contributions to science and technology that have been made by individuals and groups from various cultures.
1900: Kitty Hawks	IL	SCI.6-8.11.A.3g	Report and display the process and results of a scientific investigation.
1900: Kitty Hawks	IL	SCI.6-8.11.B.3f	Using available technology, report the relative success of the design based on the test results and criteria.
New Data	IL	SCI.6-8.11.A.3b	Conduct scientific experiments that control all but one variable.
New Data	IL	SCI.6-8.11.A.3d	Explain the existence of unexpected results in a data set.
New Data	IL	SCI.6-8.13.A.3c	Explain what is similar and different about observational and experimental investigations.
1902: Success at Last	IL	SCI.6-8.11.B.3b	Sketch, propose and compare design solutions to the problem considering available materials, tools, cost effectiveness and safety.

1903: Powered Flight	IL	SCI.6-8.11.A.3e	Use data manipulation tools and quantitative (e.g., mean, mode, simple equations) and representational methods (e.g., simulations, image processing) to analyze measurements.
1904: Improvement in Dayton	IL	SCI.6-8.11.A.3g	Report and display the process and results of a scientific investigation.
Learning to Fly: The Wright Brother's Adventure			
1997 Science			
Learning Standards			
Illinois Science			
Grades 9-10			
Activity/Lesson	**State**	**Standards**	
1900: Kitty Hawks	IL	SCI.9-10.11.B.4a	Identify a technological design problem inherent in a commonly used product.
1900: Kitty Hawks	IL	SCI.9-10.11.B.4b	Propose and compare different solution designs to the design problem based upon given constraints including available tools, materials and time.
1900: Kitty Hawks	IL	SCI.9-10.11.B.4g	Using available technology, report to an audience the relative success of the design based on the test results and criteria.
New Data	IL	SCI.9-10.11.A.4b	Conduct controlled experiments or simulations to test hypotheses.
New Data	IL	SCI.9-10.11.B.4e	Develop and test a prototype or simulation of the solution design using available materials, instruments and technology.
New Data	IL	SCI.9-10.13.A.4b	Assess the validity of scientific data by analyzing the results, sample set, sample size, similar previous experimentation, possible misrepresentation of data presented and potential sources of error.
1902: Success at Last	IL	SCI.9-10.11.B.4a	Identify a technological design problem inherent in a commonly used product.
1902: Success at Last	IL	SCI.9-10.11.B.4b	Propose and compare different solution designs to the design problem based upon given constraints including available tools, materials and time.
1902: Success at Last	IL	SCI.9-10.11.B.4d	Determine the criteria upon which the designs will be judged, identify advantages and disadvantages of the designs and select the most promising design.
1902: Success at Last	IL	SCI.9-10.11.B.4g	Using available technology, report to an audience the relative success of the design based on the test results and criteria.
1902: Success at Last	IL	SCI.9-10.13.A.4c	Describe how scientific knowledge, explanations and technological designs may change with new information over time (e.g., the understanding of DNA, the design of computers).

1903: Powered Flight	IL	SCI.9-10.11.B.4b	Propose and compare different solution designs to the design problem based upon given constraints including available tools, materials and time.
1903: Powered Flight	IL	SCI.9-10.11.B.4e	Develop and test a prototype or simulation of the solution design using available materials, instruments and technology.